

REMARKS/ARGUMENTS

Claims 1 and 5-41 are pending in this application and presented for examination. Claim 1 has been amended. Claims 2-4 have been canceled without prejudice. Claims 21-41 have been withdrawn by the Examiner. Reconsideration is respectfully requested.

Applicants affirm their election of Group I, without traverse, drawn to the compositions, wherein the biopolymer is a polysaccharide, carbon is the solid carrier and methoprene is the pesticidal agent. Claims 1-20 are readable on the elected Group.

Under M.P.E.P § 821.04, if Applicants elect claims directed to a product, and the product claims are allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claims must be rejoined as a matter of right. Therefore, Applicants respectfully point out that certain of the withdrawn process claims can be rejoined.

I. THE INVENTION

The present invention is drawn to a pesticide composition comprising: a pesticidal agent on a solid carrier; a biopolymer; and an effective amount of a plaster of paris to harden the composition, wherein the pesticidal agent maintains certified limits for at least 12 months. To more particularly point out the present invention, the claims have been amended to set forth that the pesticidal agent is an insect growth regulator.

As defined more fully below, the term "certified limits" is a set of standard concentration ranges for each of the various components within the pesticide product. If, for example, the active ingredient is outside the certified limits, the pesticide product expires and it cannot be used or sold.

II. REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 1-20 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite with regard to the term "certified limits." To the extent the rejection is applicable to the amended set of claims, Applicants respectfully traverse the rejection.

The term "certified limits" refers to a set of standardized concentration levels and is a term well known to those of skill in the art. The term "certified limits" is described in paragraph 2, on page 1 of the subject application:

The Environmental Protection Agency (EPA) sets certified limits for a pesticide product. Certified limits are required for each active ingredient, each inert ingredient, and, if the product is a technical product, each impurity of the pesticide product. The certified limits set standard concentration ranges for each of the foregoing components within the pesticide product. If, for example, the active ingredient is outside the certified limits, the pesticide product expires and cannot be used or sold.

In order to advance prosecution of the subject application, Applicants have amended claim 1 to set forth the values for certified limits with regard to the pesticial agent. Support for the certified limits values are found in Table 1, on page 3. As such, no new matter has been entered with the foregoing amendment and therefore, Applicants respectfully request that the Examiner withdraw the rejection.

III. REJECTION UNDER 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-20 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 4,876,091 ("Clarke") in view of U.S. Patent No. 4,732,762 ("Sjogren") and U.S. Patent No. 5,676,960 ("Myles"). To the extent the rejection is applicable to the amended set of claims, Applicants respectfully traverse the rejection.

As set forth in M.P.E.P. § 2143, "[t]o establish a *prima facie* case of obviousness, *three* basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

All three elements set forth above must be present in order to establish a *prima facie* case of obviousness. Applicants assert that a *prima facie* case of obviousness has not been established for the following reasons: 1) there is no suggestion or motivation to modify the references; 2) there is no reasonable expectation of success; and 3) the cited art references do not teach or suggest all the claim limitations.

1. There is no Suggestion or Motivation to Modify the References

Applicants state that there is simply no motivation or suggestion provided in the cited references to modify their teaching in the way the Examiner has contemplated. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The primary reference of Clarke does not teach or suggest the use of a biopolymer. Applicants have surprisingly found that by employing the use of a biopolymer in the inventive compositions shelf-life is advantageously extended. The longer shelf-life ensures that the product is salable longer, as it stays within the EPA mandated "certified limits," and does not expire.

The longer shelf-life as presently taught and claimed has no relationship or correlation to the "release" rate as taught by Clarke. The compositions of the present invention have better "chemical stability" than the compositions of the prior art. That is, the concentration or amount of active ingredient stays within the "certified limits" for a longer period of time than formulations of the prior art. Without being bound by any theory, it is believed that the active ingredient is "protected" from modes of degradation within the present formulations, thereby stabilizing the active ingredient and ensuring longer shelf-life.

The secondary references of Sjogren and Myles do not supply the deficiencies of the primary reference. Sjogren do not teach or suggest the use of biopolymers in the pesticidal

compositions. Myles teach liquid compositions that are intended to be applied *topically* to insects. Myles (col. 6 lines 43-55) teach polymers that are classified as "high softening point resins," intended to be used as carriers for the active ingredient to enhance a *topical* application. In Myers, the polymer (resin) is used as a "glue" to adhere the toxicant to the insects and thereafter, used as a carrier to bring the toxicant to the insect colony. The compositions of the prior art have nothing to do with extending shelf-life explicitly or inherently. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

2. There is No Reasonable Expectation of Success

In addition, there is no reasonable expectation of success that the modification that the Examiner contemplates will succeed. "Both the suggestion and the expectation of success must be found in the prior art, not the Applicants' disclosure." *In re Dow Chem. Co.*, 5 U.S.P.Q.2d 1529, 1532 (Fed. Cir. 1988).

Applicants assert that there is absolutely no teaching or suggestion in the cited art to modify the teaching therein to arrive at the presently claimed invention. Rather, the Examiner has used the Applicants' disclosure as a blueprint to pick and choose features from the prior art in an attempt to reconstruct the presently claimed invention.

The compositions of the present invention have better "chemical stability" than the compositions of the prior art. That is, the concentration or amount of active ingredient stays within the "certified limits" for a longer period of time than formulations of the prior art. The biopolymer used herein extends the shelf-life, and has nothing to do with "release life," within the field. There is simply no teaching or suggestion of using a biopolymer for increasing the shelf-life of the pesticidal composition in the cited references.

Thus, the Examiner has used hindsight reconstruction of the cited art in an attempt to piece together the present invention. Hindsight reconstruction is impermissible and therefore, Applicants respectfully request that the Examiner withdraw the rejection.

3. The Cited Art References Do Not Teach All Limitations of the Claims

The prior art references must teach or suggest all the limitations of the claims. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Applicants assert that the prior art references do not teach or suggest all the limitations of the claims and therefore, the obviousness rejection is untenable.

None of the prior art references alone or in combination teach or suggest the use of a biopolymer in a pesticide composition to extend shelf-life. By adding a biopolymer, Applicants have surprisingly found that shelf-life is extended. As the active ingredient stays within the "certified limits" for longer periods, the pesticide product does not expire and therefore can be sold.

As such, Applicants respectfully request that the Examiner withdraw the rejection.

IV. OBJECTIVE EVIDENCE REBUTS ANY *PRIMA FACIE* CASE OF OBVIOUSNESS

Applicants can rebut a *prima facie* case of obviousness by presenting comparative test data showing that the claimed invention possesses unexpectedly improved properties or properties that the prior art does not possess. *In re Dillion*, 16 U.S.P.Q. 1897, 1901 (Fed. Cir. 1990).

Applicants maintain that a *prima facie* case of obviousness has not been established. However, the comparative data filed with the application rebuts any *prima facie* case of obviousness. The Examiner's attention is respectfully directed to Example 2, and Figure 3 on page 12 of the disclosure. As explained on pages 12-13:

Fig. 3 shows a graph comparing the inventive formula for a Briquet versus data for a comparative Briquet made in accordance with U.S. Patent No. 4,732,762 [Sjogren] and the inventive Ingot shaped product. The dotted lines are the federal certified limits that define shelf-life. As long as the product is within the dotted lines, the product is within the certified limits and is a stable

product. As such, the inventive formulation results in a product without a required expiry date.

As shown in Fig. 3, the inventive composition having a biopolymer therein has increased shelf-life. The inventive products were assayed and found to be within the established certified limits. The assay data for the inventive formulations having the biopolymer are far superior to the comparative formulations of Sjogren. The comparative formulation of Sjogren without the biopolymer drops off dramatically compared to the inventive formulation.

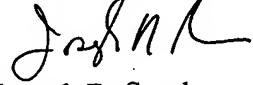
Thus, the formulations as presently claimed produce unexpectedly improved properties. These unexpected advantageous properties represent objective evidence sufficient to rebut a *prima facie* case of obviousness. Accordingly, the Examiner is respectfully requested to withdraw the 35 U.S.C. §103(a) rejection.

V. CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,


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